REMARKS

This application has been reviewed in light of the Office Action dated December 30, 2005. Claims 1-17 are pending in the application. Claim 17 has been introduced. No new matter has been added. The Examiner's reconsideration of the rejection in view of the amendment and the following remarks is respectfully requested.

By the Office Action, claims 1, 2, 4, 5, 7, 11-13, 15 and 16 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,307,839 to Gerszberg et al. (hereinafter Gerszberg). The Applicant respectfully disagrees with the rejection.

Gerszberg is directed to a telephone system that dynamically allocates bandwidth for a plurality of services over a twisted pair. The twisted pair is a standard wired connection between the telephone company and the customer premises as indicated in FIG. 1 of Gerszberg. Gerszberg takes an ATM packet and populates it in accordance with service priorities and available bandwidth. As indicated in FIGS. 6A and 6B, a frame structure is shown having time slots populated with data or voice depending on the priority of the data and availability of the timeslots over the twisted pair. To make timeslots available, Gerszberg considers reducing the quality of service and even dropping calls or services in favor of higher priority calls and services (see e.g., col. 10, lines 36-55). Gerszberg makes no mention of separate and distinction terminations or the number of channels provided to handle these terminations.

Gerszberg is directed to dynamically allocating services to an individual customer using a same twisted pair. While similarities exist between Gerszberg and the present invention, Gerszberg fails to disclose or suggest all of the claimed features of the present claims. For example, Gerszberg fails to disclose or suggest at least a network control system having an

assignment mechanism which concentrates telecommunications traffic between a multiplexer and an asynchronous transfer mode (ATM) switch on channels to compensate for a number of customer line terminations exceeding a number of voice channels. The present claims provide for a number of user terminations that can exceed a number of available channels. Gerszberg is silent as to providing telephone service to a number of customer terminations that exceed a number of available channels. Gerszberg is directed to managing bandwidth on an available channel, and reducing data, if needed, to accommodate higher demands on the same channel.

Gerszberg is silent on enabling multiple terminations for a single available channel. By the present invention, a single CPE and multiple CPEs may service multiple customers, each having, for example, a separate telephone number or termination. Each CPE may only have a limited number of channels over which information may be provided. By principles of the present invention, fewer channels are employed to service a number of terminations that exceeds the number of channels.

Claim 1 of the present invention recites, *inter alia*, a network control system having an assignment mechanism which concentrates telecommunications traffic between a multiplexer and an asynchronous transfer mode (ATM) switch on the channels to compensate for a number of customer line terminations exceeding a number of voice channels.

Claim 7 of the present invention recites, *inter alia*, concentrating telecommunications traffic between the customer terminations and an asynchronous transfer mode (ATM) switch on the channels to compensate for a number of customer line terminations exceeding a number of available channels.

Claims 1 and 7 include providing service to a plurality of line terminations even when one-to-one correspondence between the number of channels and the number of termination is exceeded. To the Applicants knowledge, in head-end digital subscriber line (DSL) networks, where digital data and voice transfer are employed, one-to-one correspondence between a number of customers and the number of available lines is maintained. Gerszberg is consistent with this assessment.

The present invention provides compensation for a number of customer line terminations exceeding a number of voice channels. Thus enabling fewer channels to support more users. Gerszberg fails to disclose or suggest at least this aspect of the present invention. Therefore, claims 1, 2, 4, 5, 7, 11-13, 15 and 16 are believed to be in condition for allowance for at least the stated reasons. Reconsideration is earnestly solicited.

By the Office Action, claims 3 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gerszberg.

The Examiner stated that a channel deallocated from use as a voice channel and reallocated as a data channel renders claims 3 and 6 obvious. The Applicant respectfully disagrees with the rejection.

Gerszberg configures a twisted pair to send the appropriate type of information to better allocate the bandwidth on a single channel. The ATM packets are populated with the services that have the highest importance to the customer. The allocation of a single channel does not teach or suggest, *inter alia*, a network control system having <u>an assignment mechanism which concentrates telecommunications traffic</u> between a multiplexer and an asynchronous

transfer mode (ATM) switch on the channels <u>to compensate for a number of customer line terminations exceeding a number of voice channels.</u>

The present invention provides fewer channels than terminations. The reallocation of a single channel for different services (e.g., voice, data or other information) in Gerszberg does not teach or suggest customer line terminations exceeding a number of voice channels as recited by the present claims. More specifically, a ratio by which customer line terminations exceeds the number of voice channels as recited in claim 3 is not disclosed or suggested by Gerszberg. Therefore, claim 3 is believed allowable for at least the reasons stated above.

Regarding Claim 6, Gerszberg fails to disclose or suggest <u>an assignment mechanism which concentrates telecommunications traffic</u> between a multiplexer and an asynchronous transfer mode (ATM) switch on the channels <u>to compensate for a number of customer line terminations exceeding a number of voice channels</u>. As such a software version of such a module is not disclosed or suggested. Therefore, claim 6 is believed allowable for at least the reasons stated above. Reconsideration of the rejection is earnestly solicited.

By the Office Action, claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gerszberg in view of U.S. Patent No. 5,274,700 to Gechter et al. (hereinafter Gechter).

Gechter fails to cure the deficiencies of Gerszberg. Gechter is directed to an Internet call rerouting system. Gechter mentions giving incoming calls priority over outgoing calls, but is directed to a completely different system, which works in a completely different way than the present invention. Gechter reroutes telephone calls over the Internet and fails to disclose

or suggest, *inter alia*, <u>concentrating telecommunications traffic</u> between the customer

terminations and an asynchronous transfer mode (ATM) switch on the channels <u>to compensate</u>

<u>for a number of customer line terminations exceeding a number of available channels.</u>

One skilled in the art would not be motivated to combine Gechter with Gerszberg

since these references are directed to completely different systems. Notwithstanding this, claim

14 is believed to be in condition for allowance at least due to its dependency from claim 7.

Reconsideration of the rejection is earnestly solicited for at least the reasons stated.

Claim 17 has been introduced. Claim 17 combined the subject matter of claims 7

and 8. Claim 8 was deemed allowable by the Examiner if rewritten in independent form

including all of the limitations of the base claim and any intervening claims. Claim 17 is

therefore believed to be in condition for allowance.

The Applicant notes with appreciation the allowability of claims 8-10 if rewritten

in independent form including all of the limitations of the base claim and any intervening claims.

However, in view of the foregoing amendments and remarks, it is respectfully submitted that all

the claims now pending in the application are in condition for allowance. Early and favorable

reconsideration of the case is respectfully requested.

It is believed that no additional fees or charges are currently due. However, in the

event that any additional fees or charges are required at this time in connection with the application,

they may be charged to applicant's Deposit Account No.

Respectfully submitted,

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